

Social network and physical function among community dwelling older adults in Iceland

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Abstract

Poor social network (SN) among older adults has been associated with low health. Only few studies have examined SN and physical function (PF) among older adults. This study examined the associations between SN and PF in community-dwelling Icelandic older adults. The current analysis is based on data from the AGES-Reykjavik Study and included participants with complete data-set at baseline and after 7.4 years of follow-up on social and PF variables (N= 2816). SN at baseline was assessed based on contact with children, relatives, friends, neighbours and marital status resulting into a SN score ranging from 0 (worst) to 3 (best). PF was assessed by grip strength, timed-up-and-go test (TUG) and Six-meter-walk-time (6MWT). The number of participants within each SN category was 13, 197, 1175 and 1431, respectively. At baseline, the lowest SN category had lower grip strength (-15 lb, P=0.03), longer TUG (0.6 sec, P=0.018) and longer 6MWT (0.4 sec, P=0.011) when compared to the highest category (corrected for age and gender). After the follow-up period, the lowest SN category had lower grip strength (-26 lb, P=0.01), longer TUG (1.2 sec, P=0.001) and longer 6MWT (0.6 sec, P=0.006) when compared to the highest category (corrected for age and gender). When additionally correcting for PF baseline values, the endpoint differences in PF roughly were halved, but remained significant for TUG and 6MWT. In community dwelling old adults poor SN is associated with low PF. A poor SN also predicts increased deterioration in TUG and 6MWT after 7.4 years of follow-up.

Keywords: family, friends, grip strength, six-meter-walk-time, timed-up-and-go test